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CONTRIBUTION TO THE KNOWLEDGE
OF THE GENUS *COLASPOIDES* LAPORTE, 1833

(COLEOPTERA, CHRYSOMELIDAE, EUMOLPINAE)

The genus *Colaspoides*, being very rich in species, needs deep revision, because practically all the described species were divided only on the basis of colour and sculpture of upperside, characters which are very variable and mostly unsatisfactory for taxonomic purpose.

During our study of Oriental *Colaspoides* many new characters were considered, such as structure of antennae, propleurae, pygidium, abdominal sternites and especially genitalia of both sexes. For this reason almost all the known species need reinvestigation and redescription.

In this paper thirteen Oriental species distributed south of Malay peninsula are revised (with one Australian species): eight Jacoby's types are among them. Additionally two new species are described.

The genus is divided into some groups for taxonomic purpose.

Next abbreviations will be used for depository place of the studied materials:

MSNG – Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy.

IRSNB – Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium.

LM – Author's collection (Institute for Problems of Ecology and Evolution, Moscow, Russia).

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TAXONOMIC PART

GROUP A. Upperside not entirely metallic, at least partly fulvous or black. Propleurae smooth and shining.

Colaspoides inconspicua Jacoby, 1896

One male syntype (from Sumatra, Pangherang-Pisang, leg. E. Modigliani) is here designated as lectotype (MSNG).

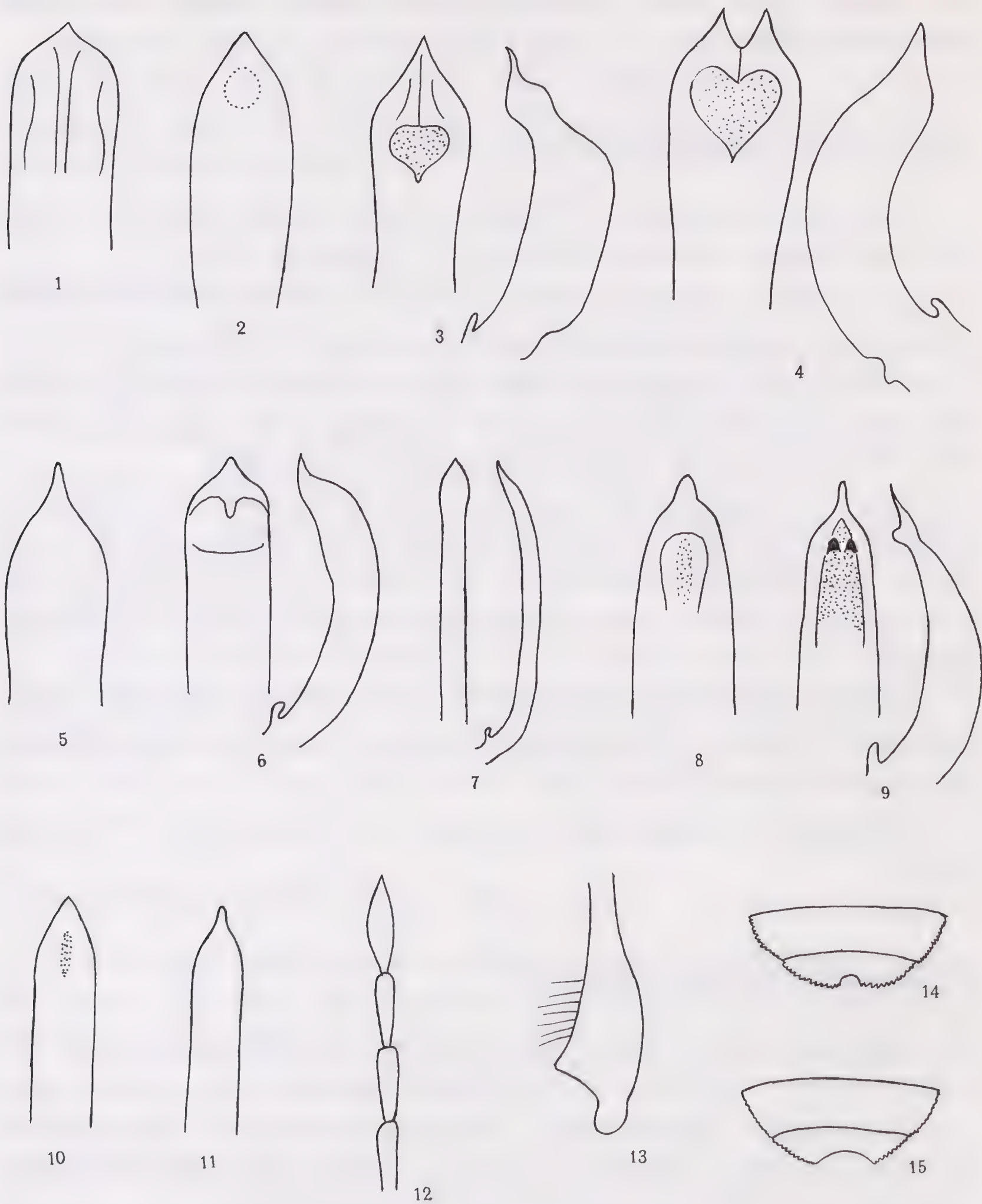
Description. Antennae thin, 9th segment about 5 times as long as wide. Furrow of pygidium without ridge, widened basally; 5th abdominal sternite without impression, almost straight on hind margin, not serrate on sides. Aedeagus (fig. 1) deeply longitudinally grooved along midline on underside.

Colaspoides parvula Baly, 1867

This species was described from Malaya. The type is unknown to me, but I have examined a small specimen from Sumatra determined by Jacoby with this name and corresponding well to the original description. Antennae thin, 9th segment about 3.5 times as long as wide, 11th segment more thick, about 2.5 times as long as wide (fig. 12). Furrow of pygidium parallel-sided, with ridge. Abdominal sternites 4 and 5 serrate on sides.

Male. 1st segment of fore and mid tarsi very feebly widened, elongate. Abdominal sternite 5 without depression, with hind margin slightly concave. Aedeagus (fig. 2) with unsclerotized middle of basal part on underside.

Material: Sumatra, Pangherang-Pisang, X.1890 and III.1891, leg. E. Modigliani, 1 male with Jacoby's label "*C. parvula* Baly" (MSNG).



Figs. 1-15: Aedeagi of *Colaspoides* (v = ventral, l = lateral): 1 - *C. inconspicua*, v; 2 - *C. parvula*, v; 3 - *C. varians*, v, l; 4 - *C. modiglianii*, v, l; 5 - *C. regularis*, v; 6 - *C. philippinensis*, v, l; 7 - *C. nigricornis*, v, l; 8 - *C. simplicipennis*, v; 9 - *C. nigripes*, v, l; 10 - *C. lefevrei*, v; 11 - *C. mentaweica*, v; 12 - *C. parvula*, segments 8th -11th of antennae; 13 - *C. regularis*, hind femur; 14-15: apical abdominal sternites of female: 14 - *C. iridipennis*; 15 - *C. punctipleuris*.

GROUP B. Upperside metallic. Propleurae smooth and shining. Fore and/or hind femora toothed. Male without brushes and armament on abdomen.

***Colaspoides modiglianii* Jacoby, 1896**

4 syntypes were studied: 1 male without abdomen and 3 females, all from Sumatra, Padang, 1890, leg. E. Modigliani (MSNG).

Description. Antennae thin, 9th segment about 4 times as long as wide. Elytra with confused rows and elevated 2-4 interspaces. Furrow of pygidium with very feeble ridge. Anterior femora with feeble tooth, practically angulate. Hind femora with strong tooth, especially angulate. Hind femora with strong tooth, especially in male.

Male. 1st segment of fore and mid tarsi moderately widened, elongate. According to Jacoby the aedeagus has bifurcate apex. I have a male specimen from Sumatra in my collection fully identical with type series and with aedeagus corresponding to Jacoby's description (fig. 4).

Female. Abdominal sternites 4 and 5 serrate on sides. Hind margin of sternite 5 with small triangular incisure in the middle. Spermatheca: see fig. 16.

This species seems to be very near to *C. varians* Baly, 1867 from Java.

***Colaspoides varians* Baly, 1867**

I have not seen a type, but the species is clear because it is the single species from Java, having toothed femora.

Description. Antennae thin, 9th segment about 4-5 times as long as wide. Furrow of pygidium with very feeble ridge, abdominal segments 4 and 5 serrate on sides. Propleurae impunctate.

Male. 1st segment of fore and mid tarsi moderately widened, elongate. Abdominal sternite 4 with large shallow impression in middle, sternite 5 with narrow transverse impression. Aedeagus (fig. 3) on underside with cordiform unsclerotized "window" and deeply impressed central line between "window" and apex.

Female. Abdominal sternite 5 with small triangular incisure in the middle of hind margin. Spermatheca (fig. 17) more or less of the

same type as in *C.modiglianii* Jac., U-like, with narrowed part before ductus.

Material: Java, 2 females (LM); Java, Preanger, 2 females (LM); Java, Palahoen, leg. Xanthus, 1 male (LM); Java occ., Buitzg., 1 female, det. Jacoby (MSNG); Java, coll. Chapuis and Du Bus, 2 females, det. Chapuis (IRSNB).

Colaspoides regularis Baly, 1867

Very clear species because of combination of toothed femora and practically regular 15 rows of punctures on each elytron.

Description. Antennae thin, 9th segment about 5 times as long as wide. Furrow of pygidium parallel-sided, with trace of ridge.

Male. 1st segment of fore and mid tarsi moderately widened, elongate. Hind femora with a row of hairs beneath before tooth (fig. 13). Aedeagus: see fig. 5.

Female. Abdominal sternite 5 distinctly serrate on sides, with semi-circular incisure in the middle of hind margin. Spermatheca: see fig. 18.

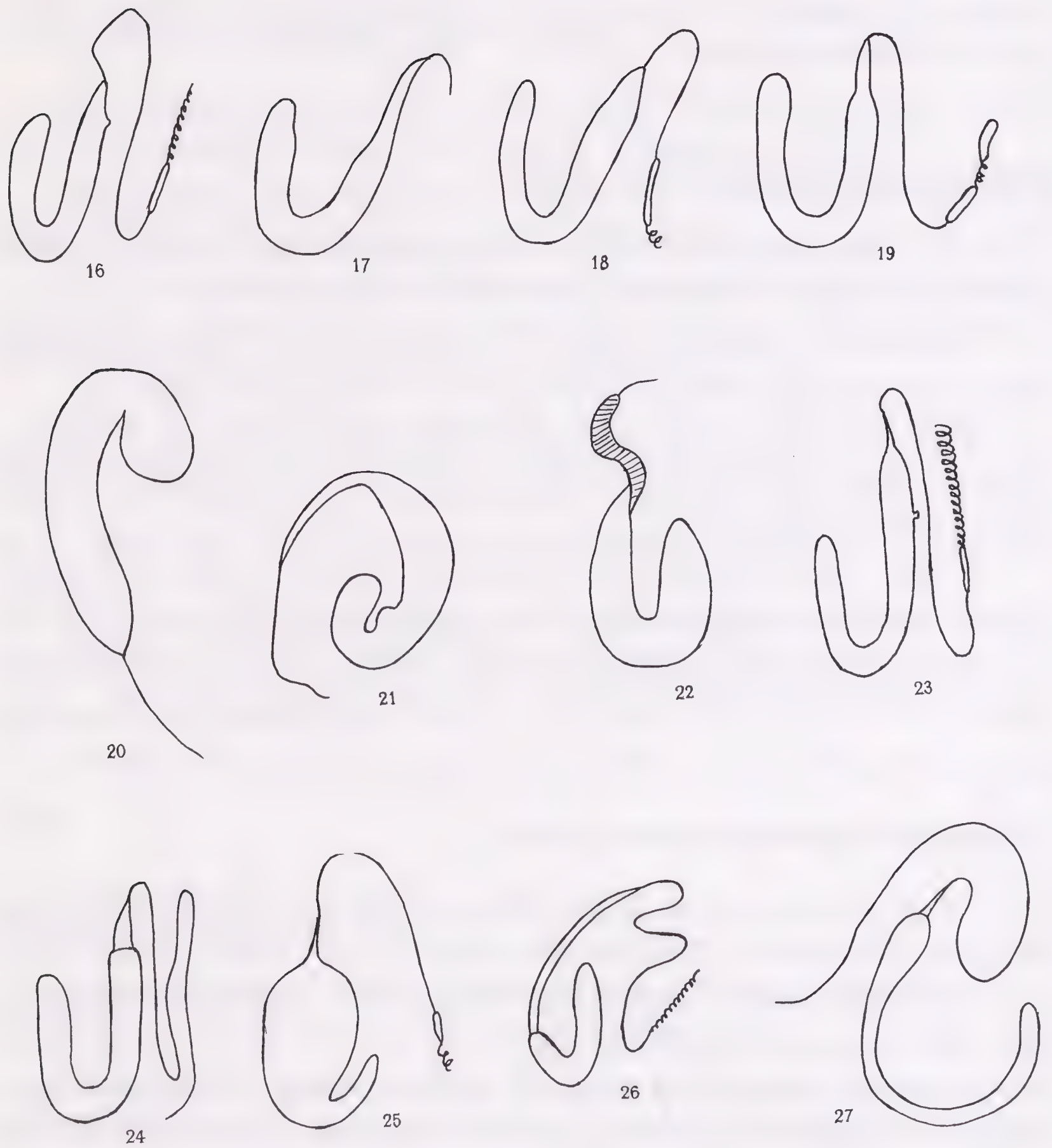
Material. Borneo, Sarawak, 1865-66, coll. G. Doria, 1 female, det. Jacoby (MSNG); Borneo, Kinabalu, 1 male and 3 females (LM).

Colaspoides glabrata Jacoby, 1884

One female specimen from Chapuis collection (IRSNB), bearing the labels "Sumatra", "*Colaspoides glabrata*" and "type?" was studied.

Description. Red purple with strong metallic lustre, antennae fulvous with two apical segments black.

Antennae moderately thin, 9th segment about 3 times as long as wide. Prothorax distinctly, but very sparsely punctuated. Elytra with not very regular geminate rows of punctures, all interspaces flat. Furrow of pygidium parallel-sided, feebly ridged. Abdominal sternites 4 and 5 serrate on sides, hind margin of sternite 5 with semicircular emargination in the middle. Anterior femora with microscopic tooth, hind femora with small tooth and a row of short hairs between tooth and base. The spermatheca (fig. 19) has short thin part of ductus prolonged in stick-like part, three spiral rings and one more stick-like part (it might be also a spiral with extremely closely placed rings).



Figs. 16-27: Spermathecae of *Colaspoides*: 16 - *C. modiglianii*; 17 - *C. varians*; 18 - *C. regularis*; 19 - *C. glabrata*; 20 - *C. nigricornis*; 21 - *C. simplicipennis*; 22 - *C. iridipennis*; 23 - *C. nigratarsis*; 24 - *C. nigripes*; 25 - *C. lefevrei*; 26 - *C. mentaweica*; 27 - *C. punctipleuris*.

GROUP C. Upperside, underside and legs (at least femora) metallic. Femora not toothed. Propleurae smooth and shining.

***Colaspoides philippinensis* Baly, 1867**

Description. Antennae thin, preapical segments about 5 times as long as wide. Furrow of pygidium without ridge. Propleurae impunctate. Aedeagus: see fig. 6.

Material: Philippines: Luzon, ex coll. Semper, 33 ex.; Bohol, ex coll. Semper, 1 ex.; Panay, coll. Chapuis, 1 ex. (IRSNB). These specimens were determined by Chapuis partly as *C. philippinensis* Baly, partly as *C. laportei* Baly. The species is very common and widely distributed on the Philippines.

***Colaspoides nigricornis* Jacoby, 1884**

A type of *C. nigricornis* Jac. (male) was studied and designated as a lectotype (IRSNB). It is a common species in Sumatra and Malay Peninsula.

Description. Antennae thin, 9th segment about 5 times as long as wide. Propleurae impunctate. Aedeagus (fig. 7) very thin. Spermatheca thick, hack-like (fig. 20).

GROUP D. Upperside metallic, underside not entirely metallic, legs dark or fulvous. Propleurae smooth and shining. Fore and hind femora not toothed. Male without brushes and armament on abdomen and hind femora.

***Colaspoides simplicipennis* Jacoby, 1885**

Nine syntypes in MSNG and one syntype in IRSNB, all from Australia, Somerset, I.[18]75, leg. L.M. D'Albertis, were studied and the lectotype male (MSNG) was designated.

Description. Antennae thin, preapical segments about 3-4 times as long as wide. Furrow of pygidium gradually widened from apex to

base, with feeble ridge. Propleurae punctate at base. Underside metallic.

Male. 1st segment of fore and mid tarsi rather strongly widened. Abdominal sternite 5 serrate on sides, feebly concave on hind margin, with round groove in middle. Aedeagus (fig. 8) with poorly delimited unsclerotized "window" on underside.

Female. Abdominal sternite 5 very feebly serrate on sides, hind margin slightly concave, almost straight. Furrow of pygidium with very feeble, almost indistinct ridge. Spermatheca: see fig. 21.

***Colaspoides iridipennis* Jacoby, 1896**

Two syntypes (MSNG), both females, from Mentawai, Sipora, Sereinu, V-VI.1894, leg. E. Modigliani and from Mentawai, Si Oban, IV-VIII.1894, leg. E. Modigliani, were studied; the specimen from Sipora was designated as lectotype.

Description. Antennae thin, 9th segment about 4 times as long as wide. Furrow of pygidium parallel-sided, slightly widened and grooved on apex, without ridge. Abdominal sternites 4 and 5 serrate on sides (more strongly on 5), hind margin of sternite 5 with deep, almost quadrangular incisure (fig. 14). Spermatheca: see fig. 22.

***Colaspoides nigritarsis* Jacoby, 1885**

One female syntype (MSNG) from Sumatra, M.te Singalang, VII.1878, leg. O. Beccari, was studied.

Description. Antennae thin, 9th segment about 5 times as long as wide. Abdominal sternites 4 and 5 not serrate on sides, sternite 5 with almost straight and irregularly serrate hind margin, having small incisure in the middle. Spermatheca: see fig. 23.

***Colaspoides nigripes* Jacoby, 1884**

The type is unknown to me, but I had the possibility to study a series of specimens from Sumatra determined and cited by JACOBY

(1896) as a variation of this species having dark fulvous or piceous legs (typical *C. nigripes* has black legs).

Description. Antennae thin, 9th segment about 5 times as long as wide. Furrow of pygidium widened to base, not ridged. Abdominal sternites 4 and 5 serrate on sides, more feeble in male.

Male. 1st segment of fore and mid tarsi strongly widened, a little longer than wide. Abdominal sternite 5 with concave hind margin, deeply grooved in middle. Aedeagus (fig. 9) twice curved before apex in lateral view, underside with large unsclerotized area divided with two tubercles before apex.

Female. Abdominal sternite 5 with semicircular incisure in the middle of hind margin. Spermatheca as in fig. 24, with ductus thin and long.

Material. Sumatra: Siboga, 1 male and 1 female; Pangherang-Pisang, 2 females; Si-Rambé, 1 male and 2 females; all collected in 1890 and 1891 by E. Modigliani (MSNG).

Colaspoides lefevrei Jacoby, 1889

Five syntypes (4 males and 1 female, MSNG) from Is. Nias, Hili Zabobo, VIII.1886, leg. E. Modigliani, were studied and the male was designated as lectotype.

Description. Antennae thin, 9th segment about 4 times as long as wide. Furrow of pygidium widened to base, with very feeble ridge.

Male. 1st segment of fore and mid tarsi moderately widened, elongate. Abdominal sternite 5 grooved in middle, feebly serrate on sides, with hind margin feebly concave. Aedeagus (fig. 10) with narrow subapical "window" on underside.

Female. Abdominal sternite 5 distinctly serrate on all margins, hind margin with small quadrangular emargination in middle, having small tooth on bottom. Spermatheca: see fig. 25.

Colaspoides mentawica n. sp.

Metallic bronze, labrum and 5 basal segments of antennae fulvous, apical segments black or piceous, underside piceous, legs dark fulvous to piceous with feeble metallic reflection.

Body broadly ovate, broadest in shoulders. Head strongly punctate, anterior margin of clypeus almost straight, vertex with longitudinal groove. Antennae thin, 9th segment about 4 times as long as wide. Prothorax 1.7 times as wide as long, widest near middle and very distinctly narrowed anteriorly, surface strongly and densely punctate. Elytra 1.3 times as long as wide, without postbasal impression, strongly and densely, partly rugosely punctate, with a few rows on apical slope and along suture. Furrow of pygidium widened basally, with feeble ridge. Abdominal sternite 5 serrate on sides.

Male. 1st segment of fore and mid tarsi strongly widened. Abdominal sternite 5 with concave hind margin, grooved in middle. Aedeagus (fig. 11) thin and long, entirely sclerotized beneath. Length 4.6-5 mm.

Female. Elytra more or less costate. Abdominal sternite 5 with small arcuate incisure in the middle of hind margin. Spermatheca as in fig. 26.

Length 5.4-5.6 mm.

Holotype (male): Mentawai, Si-Oban, IV-VIII.1894, leg. E. Modigliani (MSNG).

Paratypes: same locality, 4 males and 3 females (MSNG, with 1 spec. in LM).

These specimens were identified by Jacoby as a variation of *C. nigripes* Jac., which it is really very alike at the new species, but has quite different aedeagus.

Only two species were known from Mentawai Islands: *C. apicicornis* Jac., having toothed femora, and *C. iridescens* Jac., having other colour, finely punctured prothorax and other form of spermatheca and of 5th abdominal sternite in female.

GROUP E. Upperside metallic. Anterior and hind femora toothed. Propleurae shining, strongly punctate.

***Colaspoides punctipleuris* n. sp.**

Metallic green, labrum, palpi and antennae fulvous (apical segments a little darker than basal ones), tibiae and tarsi dark fulvous to piceous.

Body elongate ovate. Head densely and strongly punctuate, especially on clypeus, which has almost straight anterior margin. Antennae reaching middle of body, segments 7-11 moderately thickened, about twice as long as wide. Prothorax 1.9 times as wide as long, broadest before base; lateral margins rounded, anterior angles acute, posterior angles obtuse. Surface strongly and very densely punctuate with interspaces mostly smaller than punctures. Scutellum impunctuate, rounded on apex. Elytra 1.2 times as long as wide, without postbasal impression, humeral tubercle strongly convex, surface very roughly punctuate and rugose, especially near sides. Furrow of pygidium broad, parallel-sided, sharply delimited on sides, with feeble longitudinal ridge. Propleurae with large punctures. Anterior and hind femora toothed beneath. Last abdominal sternite slightly serrate on sides, with semicircular emargination on hind margin (fig. 15). Spermatheca: see fig. 27.

Length of body 6.3 mm.

Holotype (female): Borneo, ex Staudinger (LM).

This is a single not continental species which belongs to the group with distinctly punctuate propleurae. Other species of this group are known from Himalaya and Indochina, but differ well from the new species for thin antenna (preapical segments about 4-5 times as long as wide).

ABSTRACT

Thirteen species of the genus *Colaspoides*, including eight Jacoby's types, are revised and two species are described as new to science: *C. mentaweica* (from Mentawai) and *C. punctipleuris* (from Borneo).

RIASSUNTO

Contributo alla conoscenza del genere *Colaspoides* Laporte, 1833 (Coleoptera Chrysomelidae Eumolpinae).

L'Autore revisiona tredici specie asiatiche del genere *Colaspoides*, studiando in otto casi il materiale tipico descritto da Jacoby alla fine dell'Ottocento.

Per un miglior inquadramento sistematico si sono individuati cinque gruppi di specie all'interno del genere e per ogni specie vengono segnalati i caratteri morfologici che ne rendono possibile l'identificazione, illustrando in particolare per la prima volta edeagi e spermateche.

Sono infine descritte due specie nuove: *C. mentaweica* (dell'Is. Mentawai) e *C. punctipleuris* (di Borneo).